

IN THE CLAIMS:

Please amend claims 15, 19, 23, 27, 30, 33 and 36 to  
read as follows:

5.5  
c1  
B1

15. Digital signal conversion apparatus for converting a first digital image signal to a second digital image signal having a high resolution component, comprising:  
a memory for storing class data for respective classes at addresses corresponding to said respective classes,  
said class data being associated with at least a training digital image signal having said high resolution component;  
means for receiving said first digital image signal including pixel data representing pixel values;  
means for clustering a plurality of pixel data of said first digital image signal adjacent to a pixel data of said second digital image signal to produce a class;  
means for retrieving said class data from one of said addresses of said memory corresponding to said class of said first digital image signal; and  
means for generating all of pixel data representing pixel values of said second digital image signal based upon at least said retrieved class data.

19. A digital signal data conversion method for converting a first digital image signal to a second digital image signal having a high resolution component, comprising the steps of:

B2  
5.5  
c2

Sub C2  
B2  
C2  
storing class data for respective classes at addresses in a  
memory corresponding to said respective classes, said  
class data being associated with at least a training  
digital image signal having said high resolution  
component;  
receiving said first digital image signal including pixel data  
representing pixel values;  
clustering a plurality of pixel data of said first digital image  
signal adjacent to a pixel data of said second digital  
image signal to produce a class;  
retrieving said class data from one of said addresses of said  
memory corresponding to said class of said first  
digital video signal; and  
generating all of pixel data representing pixel values of said  
second digital image signal based upon at least said  
retrieved class data.

Sub C3  
B3  
23. Digital signal conversion apparatus for converting a  
digital video signal admitting of a first standard into a digital  
video signal admitting of a second standard, a first resolution  
of said digital video signal admitting of said first standard  
being lower than a second resolution of said digital video signal  
admitting of said second standard, comprising:  
a memory for storing class data for respective classes at  
addresses corresponding to said respective classes,  
said class data being associated with at least a

Sub 3  
B3  
means for receiving an input digital video signal including pixel data and admitting of said first standard;  
means for clustering a plurality of pixel data of said input digital video signal adjacent to a pixel data of a second digital video signal to produce a class;  
means for retrieving said class data from one of said addresses of said memory corresponding to said class of said input digital video signal admitting of said first standard; and  
means for generating all of pixel data representing pixel values of said digital video signal admitting of said second standard based upon at least said class data which has been retrieved.

27. Digital signal conversion apparatus for converting a standard definition digital video signal to a high definition digital video signal, comprising:

Sub 4  
B4  
a memory for storing class data for respective classes at addresses corresponding to said respective classes, said class data being associated with at least a training high definition video signal;  
means for receiving a standard definition digital video signal having pixel data representing pixel values;  
means for clustering a plurality of pixel data of said standard definition digital video signal adjacent to a pixel

Sub  
C4

data of a second digital video signal to produce a  
class;

B4  
r'd

means for retrieving said class data from one of said addresses  
of said memory corresponding to said class of said  
standard definition digital video signal; and  
means for generating all of pixel data representing pixel values  
of a high definition digital video signal based upon  
at least said retrieved class data.

30. A digital signal conversion method, comprising the  
steps of:

Sub  
CS

storing class data for respective classes at addresses in a  
memory corresponding to said respective classes, said  
class data being associated with at least a training  
high definition digital video signal;

receiving a standard definition digital video signal having pixel  
data representing pixel values;

B5

clustering a plurality of pixel data of said standard definition  
digital video signal adjacent to a pixel data of a  
second digital video signal to produce a class;  
retrieving said stored class data from one of said addresses  
corresponding to said class of said standard  
definition digital video signal; and

generating all of pixel data representing pixel values of a  
second output digital video signal based upon at least  
said retrieved class data.

33. Digital data conversion apparatus for converting a first digital image signal to a second digital image signal having a high resolution component, comprising:

55  
C6  
a memory for storing class data for respective classes at addresses corresponding to said respective classes, said class data being associated with at least a training digital image data having said high resolution component;

means for receiving said first digital image signal including pixel data representing pixel values;

B6  
means for clustering a plurality of pixel data of said first digital image signal adjacent to a plurality of pixel data of said second digital image signal to produce a class, said class being used to retrieve a class data to generate a plurality of pixel data representing pixel values of a second digital image signal;

means for retrieving said class data from addresses of said memory corresponding to said class of said first digital image signal; and

means for generating a plurality of pixel data representing pixel values of said second digital image signal based upon said retrieved class data.

36. Digital data conversion method for converting a first digital image signal to a second digital image signal having a high resolution component, comprising the steps of:

56  
C7  
B7  
storing class data for respective classes at addresses in a memory corresponding to said respective classes, said class

*Sub C7*  
data being associated with at least a training digital image data having said high resolution component;

receiving said first digital image signal including pixel data representing pixel values;

*By 'd*  
clustering a plurality of pixel data of said first digital image signal adjacent to a plurality of pixel data of said second digital image signal to produce a class, said class using to retrieve a class data to generate a plurality of pixel data representing pixel values of a second digital image signal;

retrieving said class data from addresses of said memory corresponding to said class of said first digital image signal; and

generating a plurality of pixel data representing pixel values of said second digital image signal based upon said retrieved class data.

#### REMARKS

In light of the amendments to the application noted above and remarks to follow, reconsideration and allowance of the above-referenced application are respectfully requested.

By Advisory Action of February 9, 2000, the Examiner has indicated that the Amendment filed October 28, 1999 was in improper form for making amendments to a reissue. Applicant submits this substitute amendment caring the defects noted by the Examiner. Specifically, the entire text of each claim being